

## AMENDMENTS

Please amend the claims as follows:

I claim:

1        1. (twice amended) A brake disk for use with a disk brake system having  
2        brake pads constituting friction elements for axially engaging the disk, comprising:  
3              a disk member arrayed about a central axis and having an outer rim and an  
4              inner rim, and an obverse face and a reverse face arrayed about a disk plane,  
5        wherein  
  
6              each said obverse face and reverse face is provided with circumferentially  
7              alternating protruding segments and indented segments, arranged in such a  
8              manner that said disk plane is entirely contained in the material of the disk  
9              throughout the intersection therewith, with said protruding segments being  
10         adapted for physically engaging the friction elements of the brake pads.

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1        2. (original) The brake disk of claim 1, wherein  
2              each said protruding segment includes a leading edge for gripping the  
3              brake pad upon engagement.

1           3. (previously amended) The brake disk of claim 2, wherein  
2           each said leading edge has an angle of incidence with the brake pad in the  
3           range between 0° and -45°..

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1           4. (original) The brake disk of claim 1, wherein  
2           each said indented segment is open to said outer rim and said inner rim  
3           such that air flow is facilitated therethrough.

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1           5. (original) The brake disk of claim 1, wherein  
2           each of said outer rim and said inner rim is scalloped in shape to provide  
3           increased surface area for heat dissipation.

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1           6. (original) The brake disk of claim 1, wherein  
2           each said protruding segment is circumferentially wider than the adjacent  
3           indented segments.

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1           7. (previously amended) The brake disk of claim 6, wherein  
2           the circumferential width ratio of said indented segments to said

3 protruding segments is in the range of 10% to 40%.

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1 8. (twice amended) In a disk braking system for use in transrotary motion  
2 applications, including brake pads constituting friction elements for engaging the  
3 surface of a brake disk the improvement comprising:

4 providing the brake pad engaging surface of the brake disk with  
5 alternating protruding segments for engaging the friction elements of the brake  
6 pads and indented segments for facilitating cooling, with a bisecting disk plane  
7 situated so as lie entirely the material of the disk throughout the ring of  
8 intersection therewith.

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1 9. (original) The improvement of claim 8, wherein  
2 each said protruding segment is circumferentially wider than the adjacent  
3 ones of said indented segments.

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1 10. (previously amended) The improvement of claim 9, wherein  
2 each said indented segment has circumferentially width of less than 40%  
3 of that of said protruding segments.

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1        11. (previously amended) The improvement of claim 8, and further  
2              including  
3              an irregularly shaped outer rim and an irregularly shaped inner rim such  
4              that expanded surface area is provided to aid heat dissipation therefrom.

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1        12. (original) The improvement of claim 8, and further providing that  
2              the opposing axial surfaces of the disk both include alternating protruding  
3              segments and indented segments and the indented segments on one surface are  
4              situated axially opposite protruding segments on the opposing surface.

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1        13. (original) The improvement of claim 8, wherein  
2              each said protruding segment is circumferentially wider than the adjacent  
3              ones of said indented segments.

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1        14. (original) The improvement of claim 8, wherein  
2              each said protruding segment has a leading edge for engaging with and  
3              gripping the surface of the brake pad.

**Serial No.: 10/667,122**  
**Brake Disk for Vehicles**  
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**Art Unit: 7151**  
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15. (previously amended) The improvement of claim 14, wherein  
each said leading edge is adapted to engage the brake pad at a radial angle  
of less than 45 degrees.